Remarks

Claims 3-5 and 16-31 are currently pending in the above-captioned matter. By this amendment, claims 3-5, 16 and 17 are cancelled, without prejudice. Claims 19, 23, 26, 29 have been amended and new claims 32-35 have been added; no new matter has been added. Support for the amendments is found at page 6, ln 10-14; page 9, ln 18-29; page 13, ln 1-6; page 28, last paragraph and page 29, last paragraph.

Claims 18-35 are now pending in this application. Remarks made herein are based on the claims as amended hereby.

Objected to Claims

Claim 17 was objected to as being of improper dependent form. Claim 17 has been cancelled and the objection should be withdrawn.

35 U.S.C. §103 Rejections

Claims 3, 5 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dolan (US 5,427,632), in view of applicant's admitted prior art. This rejection is rendered moot by the cancellation of claims 3, 5 and 16-17, without prejudice.

Claims 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greene (US 4,298,404). This rejection is hereby traversed.

Independent claim 18 and claims 19-22 depending therefrom, are directed to a composition comprising "e) iron(III) cations in concentrations from **at least 3 g/l** to at most 100 g/l".

Greene is directed to forming a film on zinc surfaces and teaches using at most 4 g/l ferric nitrate ($Fe(NO_3)_3 9H_2O$), which equates to **0.55 g/l ferric cation** and in Example 18 teaches using 2 g/l ammonium ferric fluoride ($(NH_4)_3 FeF_6$), which equates to **0.52 g/l ferric cations**. (Greene, col. 5, line 6 and col. 12, lines 15-25). These

amounts are significantly less than the amounts claimed in claim 18 and 19.

There is no teaching or suggestion in Greene to use amounts as claimed and no motivation to one of skill in the art to increase the amounts of Greene where the purpose of the addition of iron in Greene and in Applicant's invention is different. The composition of claim 18, and its dependent claims, is for use in pickling and the amount of ferric cation is for the pickling reaction, see original specification, page 10, line 12-26. One of ordinary skill in the art reading Greene would not be motivated to increase the ferric cation concentration for fear of removing the zinc coating on the steel substrate that is used in Greene. The rejection should be withdrawn.

Claims 23-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greene, and further in view of Dolan. This rejection is hereby traversed.

Claim 23-25, depend from claim 18 and thus include all of its limitations. These claims are patentable over the combination of Greene and Dolan for the reasons recited above regarding the patentability of claim 18 over Greene. Dolan does not remedy the deficiencies of Greene where Dolan fails to teach or suggest amounts of ferric cation as recited in the claims.

Claims 23-25 are further patentable over Greene in view of Dolan where both references are directed to depositing a coating not pickling. Applicant hereby disputes the Patent Office statement that appears to equate cleaning with pickling: "Dolan further teaches that metal surface is first cleaned (i.e. pickling) to remove contaminants (col. 7, lines 12-26)." (Official Action of February 7, 2008, page 3, line 8-9). Those of skill in the art would not read Dolan as teaching or suggesting pickling the metal. Firstly, Dolan teaches cleaning to remove "organic contaminants, foreign metal fines and /or inclusions." (Dolan, col. 7, lines 12-15). Pickling is known by those of skill in the art to be directed to removing oxidation, commonly known as scale, generated by exposure of metal to oxygen. There is no teaching or suggestion in Dolan to remove oxidation by dissolving the underlying metal, as is done in pickling. Dolan does not mention pickling anywhere within its four corners, but instead teaches cleaning with a

conventional hot alkaline cleaner, rinsing with water and neutralizing any remaining alkalinity from the hot alkaline cleaner with a neutralizing acidic rinse. (Dolan, col. 7, lines 15-26). Accordingly, any conclusion that Dolan teaches or suggests a pickling step or a pickled substrate is simply not supported by the disclosure of Dolan and a rejection based on that conclusion cannot stand.

Claim 23 specifically recites contacting steel for a time sufficient to obtain a completely de-scaled surface and the step of managing the redox potential, which is neither taught nor suggested by the references. The rejection must be withdrawn.

Independent process claim 26, and claims 27-31 depending therefrom, are also patentable over the combination of Greene in view of Dolan. Independent claim 26 recites the same amount of ferric cation of at least 3 g/l. The arguments regarding patentability of claim 18 are incorporated herein by reference. For those same reasons, the rejection must be withdrawn.

Claim 26 also recites the process feature of "said contacting being for a time sufficient to obtain a completely de-scaled surface". This feature is neither taught nor suggested, nor could it be, by the references where they are directed to forming a film or conversion coating, not to pickling. As discussed above, Dolan provides no teaching of pickling the metal substrate. The rejection must be withdrawn.

New claims 32-35 are directed to further aspects of the invention and are patentable over the art of record. The brightening process of claims 32-35 requires a rinsing process after coating to remove the strong acid and oxidizing agent from the brightened surface. Dolan teaches against rinsing after coating where it is directed to applying a dried in place conversion coating.

Conclusion

Applicants request reconsideration in view of the amendments and remarks contained herein. Applicants submit that the claims are in condition for allowance and a notice to that effect is respectfully requested. Should the Examiner have any questions regarding this paper, please contact the undersigned.

Respectfully submitted,

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